(FILE 'HOME' ENTERED AT 00:07:51 ON 16 DEC 2006) FILE 'REGISTRY' ENTERED AT 00:08:04 ON 16 DEC 2006 L1 STRUCTURE UPLOADED L2227 S L1 SSS FUL FILE 'CAPLUS, USPATFULL' ENTERED AT 00:08:50 ON 16 DEC 2006 115 FILE CAPLUS L3 L4 16 FILE USPATFULL TOTAL FOR ALL FILES 131 S L2 L5 FILE 'REGISTRY' ENTERED AT 00:13:05 ON 16 DEC 2006 STRUCTURE UPLOADED L6 L7 156 S L6 SSS FUL FILE 'CAPLUS, USPATFULL' ENTERED AT 00:13:31 ON 16 DEC 2006 L8 32 FILE CAPLUS L9 13 FILE USPATFULL TOTAL FOR ALL FILES 45 S L7 L10 FILE 'REGISTRY' ENTERED AT 00:20:32 ON 16 DEC 2006 STRUCTURE UPLOADED L11 SAVE ALL TEMP L09767283/L FILE 'REGISTRY' ENTERED AT 00:38:52 ON 16 DEC 2006 STRUCTURE UPLOADED L12 24 S L12 SSS FUL L13 FILE 'CAPLUS, USPATFULL, TOXCENTER' ENTERED AT 00:40:40 ON 16 DEC 2006 L1423 FILE CAPLUS 10 FILE USPATFULL L15 L16 18 FILE TOXCENTER TOTAL FOR ALL FILES L17 51 S L13

FILE 'SYNTHLINE' ENTERED AT 00:44:33 ON 16 DEC 2006

SAVE ALL L09767283/L

1 S L13

L18

C:\Program Files\Stnexp\Queries\09767283b.str

### chain nodes:

12 20 22 24 35 36 37 38 39 45 46 47 48 49 50 56 57 64 65 66 68 74 75 76 78 84 85 86 87 88 89 90 91 92 93 94 95 97 98 104 105 106 107 108 110 111 112 113 128 ring nodes :

1 2 3 4 5 6 7 8 9 10 11 13 14 15 16 17 18 25 26 27 28 29 30 31 32 33 34 40 41 42 43 44 51 52 53 54 55 58 59 60 61 62 63 67 69 70 71 72 73 77 79 80 81 82 83 96 99 100 101 102 103 109 114 115 116 117 118

## chain bonds:

7-24 8-22 9-128 11-16 27-35 37-38 37-46 38-39 38-40 42-47 44-45 48-49 48-56 49-50 49-51 52-57 55-58 64-65 64-68 65-66 65-67 74-75 74-78 75-76 75-77 81-84 84-85 84-86 87-88 87-89 89-90 89-91 91-92 92-93 93-94 94-95 94-98 95-96 95-97 104-105 104-111 105-106 105-110 106-107 107-108 107-112 108-109 108-113

# ring bonds:

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15 15-16 16-17 17-18 25-26 25-30 26-27 27-28 28-29 29-30 29-31 30-34 31-32 32-33 33-34 40-41 40-44 41-42 42-43 43-44 51-52 51-55 52-53 53-54 54-55 58-59 58-63 59-60 60-61 61-62 62-63 67-69 67-73 69-70 70-71 71-72 72-73 77-79 77-83 79-80 80-81 81-82 82-83 96-99 96-103 99-100 100-101 101-102 102-103 109-114 109-118 114-115 115-116 116-117 117-118

### exact/norm bonds:

5-7 6-11 7-8 7-24 8-9 8-22 9-10 9-128 10-11 37-38 38-39 40-41 40-44 41-42 42-43 43-44 48-49 49-50 51-52 51-55 52-53 53-54 54-55 64-65 65-66 74-75 75-76 77-79 77-83 79-80 80-81 81-82 81-84 82-83 84-86 87-89 89-90 94-95 94-98 95-96 104-105 105-110 106-107 107-108 108-113

### exact bonds:

11-16 27-35 37-46 38-40 42-47 44-45 48-56 49-51 52-57 55-58 64-68 65-67 74-78 75-77 84-85 87-88 89-91 91-92 92-93 93-94 95-97 104-111 105-106 107-112 108-109 normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 13-14 13-18 14-15 15-16 16-17 17-18 25-26 25-30 26-27 27-28 28-29 29-30 29-31 30-34 31-32 32-33 33-34 58-59 58-63 59-60 60-61 61-62 62-63 67-69 67-73 69-70 70-71 71-72 72-73 96-99 96-103 99-100 100-101 101-102 102-103 109-114 109-118 114-115 115-116 116-117 117-118

G1:Cb,Cy,Hy,Ak

G2:[\*1],[\*2],[\*3],[\*4],[\*5],[\*6],[\*7],[\*8]

### Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:CLAS\$21:Atom 22:CLAS\$24:CLAS\$ 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:CLAS\$ 36:CLAS\$37:CLAS\$38:CLAS\$39:CLAS\$40:Atom 41:Atom 42:Atom 43:Atom 44:Atom 45:CLAS\$46:CLAS\$ 47:CLAS\$48:CLAS\$49:CLAS\$50:CLAS\$51:Atom 52:Atom 53:Atom 54:Atom 55:Atom 56:CLAS\$57:CLAS\$ 58:Atom 59:Atom 60:Atom 61:Atom 62:Atom 63:Atom 64:CLAS\$65:CLAS\$66:CLAS\$67:Atom 68:CLAS\$ 69:Atom 70:Atom 71:Atom 72:Atom 73:Atom 74:CLAS\$75:CLAS\$76:CLAS\$7:Atom 78:CLAS\$79:Atom 80:Atom 81:Atom 82:Atom 83:Atom 84:CLAS\$85:CLAS\$86:CLAS\$87:CLAS\$88:CLAS\$89:CLAS\$90:CLAS\$ 91:CLAS\$93:CLAS\$94:CLAS\$95:CLAS\$96:Atom 97:CLAS\$98:CLAS\$99:Atom 100:Atom 101:Atom 102:Atom 103:Atom 104:CLAS\$105:CLAS\$106:CLAS\$107:CLAS\$108:CLAS\$109:Atom 110:CLAS\$ 111:CLAS\$112:CLAS\$113:CLAS\$114:Atom 115:Atom 116:Atom 117:Atom 118:Atom 128:CLAS\$

wed using STN Express query preparation.

#### => d his

(FILE 'HOME' ENTERED AT 00:07:51 ON 16 DEC 2006)

FILE 'REGISTRY' ENTERED AT 00:08:04 ON 16 DEC 2006

L1 STRUCTURE UPLOADED

L2 227 S L1 SSS FUL

FILE 'CAPLUS, USPATFULL' ENTERED AT 00:08:50 ON 16 DEC 2006

L3 115 FILE CAPLUS

L4 16 FILE USPATFULL

TOTAL FOR ALL FILES

L5 131 S L2

FILE 'REGISTRY' ENTERED AT 00:13:05 ON 16 DEC 2006

L6 STRUCTURE UPLOADED

L7 156 S L6 SSS FUL

FILE 'CAPLUS, USPATFULL' ENTERED AT 00:13:31 ON 16 DEC 2006

L8 32 FILE CAPLUS

L9 13 FILE USPATFULL

TOTAL FOR ALL FILES

L10 45 S L7

FILE 'REGISTRY' ENTERED AT 00:20:32 ON 16 DEC 2006 L11 STRUCTURE UPLOADED

=> save all temp

ENTER NAME OR (END):109767283/1

L# LIST L1-L11 HAS BEEN SAVED AS 'L09767283/L'

=>

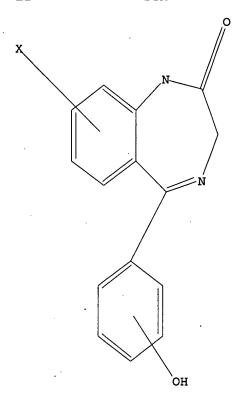
http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\09767283.str

L1 STRUCTURE UPLOADED

=> d . L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss ful

ANSWER 30 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

IT 102526-94-3P 145434-34-0P 145434-35-1P

145434-36-2P 145434-37-3P 145434-38-4P

145448-50-6P 145434-39-5P 145434-40-8P 145448-49-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

ACCESSION NUMBER: 1993:59682 CAPLUS

DOCUMENT NUMBER: 118:59682

TITLE: A general and expedient method for the solid-phase

synthesis of 1,4-benzodiazepine derivatives

AUTHOR (S):

Bunin, Barry A.; Ellman, Jonathan A. Dep. Chem., Univ. California, Berkeley, CA, 94720, USA CORPORATE SOURCE:

SOURCE: Journal of the American Chemical Society (1992),

114(27), 10997-8

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal English LANGUAGE:

145434-34-0P 145434-35-1P 145434-36-2P

145434-37-3P 145434-38-4P 145434-39-5P

145448-49-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 145434-34-0 CAPLUS

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-CN

dimethyl-, (S)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

RN145434-35-1 CAPLUS

2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-CN hydroxyphenyl)-3-methyl-, (S)- (9CI) (CA INDEX NAME)

RN 145434-36-2 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-1-propyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 145434-37-3 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1-methylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 145434-38-4 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 3-(4-aminobutyl)-7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $(CH_2)_4$ 
 $S$ 
 $C1$ 
 $OH$ 

RN 145434-39-5 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]-, (S)- (9CI) (CA INDEX NAME)

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L10 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
     12794-10-4P, Benzodiazepine
                                  62492-75-5P, (S)-7-Chloro-1,3-dihydro-5-(4-
IT
     hydroxyphenyl)-3-methyl-2H-1,4-benzodiazepin-2-one 145434-34-0P,
     (S)-7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-dimethyl-2H-1,4-
     benzodiazepin-2-one 145434-35-1P, (S)-7-Chloro-1,3-dihydro-5-(4-
     hydroxyphenyl) -1-ethyl-3-methyl-(2H)-1,4-benzodiazepin-2-one
     145434-37-3P, (S)-7-Chloro-1,3-dihydro-1-ethyl-5-(4-hydroxyphenyl)-
     3-isopropyl-2H-1,4-benzodiazepin-2-one 145434-38-4P,
     (S)-7-Chloro-1,3-dihydro-1-ethyl-5-(4-hydroxyphenyl)-3-(4-aminobutyl)-2H-
     1,4-benzodiazepin-2-one 145434-39-5P, (S)-7-Chloro-1,3-dihydro-5-
     (4-hydroxyphenyl)-1-ethyl-3-(4-hydroxyphenylmethyl)-(2H)-1,4-benzodiazepin-
             145434-40-8P, (S)-8-Carboxy-7-chloro-1,3-dihydro-3-methyl-5-phenyl-
     1-phenylmethyl-(2H)-1,4-benzodiazepin-2-one 145448-49-3P,
     (S)-7-Chloro-1,3-dihydro-3-carboxymethyl-1-ethyl-5-(4-hydroxyphenyl)-2H-
                              145448-50-6P, (S)-8-Carboxy-7-chloro-1,3-dihydro-
     1,4-benzodiazepin-2-one
     1-methyl-5-phenyl-3-phenylmethyl-(2H)-1,4-benzodiazepin-2-one
     155505-53-6P, (S)-1-Allyl-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-
     3-methyl-(2H)-1,4-benzodiazepin-2-one 155505-54-7P, (S)-8-Carboxy-7-
     chloro-1,3-dihydro-1,3-dimethyl-5-phenyl-(2H)-1,4-benzodiazepin-2-one
     155505-58-1P 155505-60-5P, 7-Chloro-1,3-dihydro-5-(4-
     hydroxyphenyl)-1,3-dimethyl-2H-1,4-benzodiazepin-2-one
     155505-61-6P, 7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-ethyl-3-
     methyl-(2H)-1,4-benzodiazepin-2-one 155505-62-7P,
     1-Allyl-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-(2H)-1,4-
     benzodiazepin-2-one 155505-63-8P, 7-Chloro-1,3-dihydro-5-(4-
     hydroxyphenyl)-1-ethyl-3-(4-hydroxyphenylmethyl)-(2H)-1,4-benzodiazepin-2-
           155505-64-9P, 8-Carboxy-7-chloro-1,3-dihydro-1,3-dimethyl-5-phenyl-
     (2H) -1,4-benzodiazepin-2-one 155505-65-0P, 7-Chloro-1,3-dihydro-
     1-ethyl-5-(4-hydroxyphenyl)-3-isopropyl-2H-1,4-benzodiazepin-2-one
     155505-66-1P, 7-Chloro-1,3-dihydro-3-carboxymethyl-1-ethyl-5-(4-
     hydroxyphenyl)-2H-1,4-benzodiazepin-2-one
                                                 155505-67-2P,
     8-Carboxy-7-chloro-1,3-dihydro-1-methyl-5-phenyl-3-phenylmethyl-(2H)-1,4-
     benzodiazepin-2-one
                          155505-68-3P, 8-Carboxy-7-chloro-1,3-dihydro-3-
     methyl-5-phenyl-1-phenylmethyl-(2H)-1,4-benzodiazepin-2-one
     155505-69-4P, 7-Chloro-1,3-dihydro-1-ethyl-5-(4-hydroxyphenyl)-3-
     (4-aminobutyl)-2H-1,4-benzodiazepin-2-one
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (solid-phase and combinatorial preparation of)
ACCESSION NUMBER:
                         1994:409430 CAPLUS
DOCUMENT NUMBER:
                         121:9430
TITLE:
                         Solid phase and combinatorial synthesis of
                         benzodiazepine compounds on a solid support
                         Ellman, Jonathan A.
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Regents of the University of California, USA
SOURCE:
                         U.S., 25 pp.
                         CODEN: USXXAM
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     US 5288514
                          Α
                                19940222
                                            US 1992-944469
                                                                    19920914
     WO 9406291
                          A1
                                19940331
                                            WO 1993-US8709
                                                                    19930913
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             SD, SE, SK, UA, US, VN
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
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     AU 9349231
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                                                                    19930913
     US 5545568
                          Α
                                19960813
                                            US 1993-161677
                                                                    19931202
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US 1992-944469

A2 19920914

PRIORITY APPLN. INFO.:

Absolute stereochemistry.

RN 145434-35-1 CAPLUS
CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-, (S)- (9CI) (CA INDEX NAME)

RN 145434-37-3 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1-methylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 145434-38-4 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 3-(4-aminobutyl)-7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 145434-39-5 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]-, (S)- (9CI) (CA INDEX NAME)



RN 145448-49-3 CAPLUS

CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-1-ethyl-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 155505-53-6 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-1-(2-propenyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 155505-58-1 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-, (R)- (9CI) (CA INDEX NAME)

RN 155505-60-5 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-dimethyl- (9CI) (CA INDEX NAME)

RN 155505-61-6 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl- (9CI) (CA INDEX NAME)

RN 155505-62-7 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-1-(2-propenyl)- (9CI) (CA INDEX NAME)

RN 155505-63-8 CAPLUS
CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]- (9CI) (CA INDEX NAME)

RN 155505-65-0 CAPLUS
CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1-methylethyl)- (9CI) (CA INDEX NAME)

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ANSWER 28 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN
L10
     17270-12-1P
                  17311-35-2P
                                62492-75-5P
                                               102526-94-3P
                                                               103342-83-2P
     145434-34-0P 145434-35-1P 145434-36-2P
     145434-37-3P 145434-38-4P 145448-49-3P
     155505-58-1P
                  156814-69-6P 156814-70-9P
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                    156816-14-7P
                                   156816-15-8P
                                                  156816-16-9P
                                                                  156816-17-0P
     156816-18-1P
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                                   156816-25-0P
                                                  156816-26-1P
                                                                  156816-27-2P
     156847-05-1P 156847-06-2P 156847-07-3P
     156847-08-4P 156847-09-5P 156847-10-8P
     156847-11-9P
                    156847-12-0P
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                                                  156847-14-2P
     156847-15-3P
                    156847-16-4P
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     156847-70-0P 156884-82-1P
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        (preparation and cholecystokinin receptor binding activity of, structure in
        relation to)
ACCESSION NUMBER:
                         1995:16748 CAPLUS
DOCUMENT NUMBER:
                         122:71334
TITLE:
                         The combinatorial synthesis and chemical and
                         biological evaluation of a 1,4-benzodiazepine library
AUTHOR (S):
                         Bunin, Barry A.; Plunkett, Matthew J.; Ellman,
                         Jonathan A.
CORPORATE SOURCE:
                         Dep. Chem., Univ. California, Berkeley, CA, 94720, USA
                         Proceedings of the National Academy of Sciences of the
SOURCE:
                         United States of America (1994), 91(11), 4708-12
                         CODEN: PNASA6; ISSN: 0027-8424
```

```
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
    145434-34-0P 145434-35-1P 145434-36-2P
     145434-37-3P 145434-38-4P 145448-49-3P
     155505-58-1P 156814-70-9P 156814-71-0P
     156814-72-1P 156814-84-5P 156814-85-6P
     156814-86-7P 156814-87-8P 156814-88-9P
     156814-89-0P 156814-90-3P 156814-91-4P
     156814-92-5P 156814-93-6P 156814-94-7P
     156814-95-8P 156814-96-9P 156814-97-0P
     156814-98-1P 156815-00-8P 156815-01-9P
     156815-02-0P 156815-03-1P 156815-04-2P
     156815-05-3P 156815-06-4P 156815-07-5P
     156815-08-6P 156815-09-7P 156815-10-0P
     156815-12-2P 156815-13-3P 156815-14-4P
     156815-15-5P 156815-16-6P 156815-17-7P
     156815-18-8P 156815-20-2P 156815-21-3P
     156815-22-4P 156815-23-5P 156815-24-6P
     156815-25-7P 156815-26-8P 156815-28-0P
     156815-29-1P 156815-30-4P 156815-31-5P
     156815-32-6P 156815-33-7P 156815-34-8P
     156815-35-9P 156815-36-0P 156815-37-1P
     156815-38-2P 156815-40-6P 156815-41-7P
     156815-42-8P 156815-43-9P 156815-44-0P
     156815-45-1P 156847-05-1P 156847-06-2P
     156847-07-3P 156847-08-4P 156847-09-5P
     156847-10-8P 156847-11-9P 156847-70-0P
     156884-82-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and cholecystokinin receptor binding activity of, structure in
        relation to)
RN
     145434-34-0
                 CAPLUS
     2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-
CN
     dimethyl-, (S)- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 156814-70-9 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1-methylethyl)-1-(phenylmethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-71-0 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1H-indol-3-ylmethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-72-1 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1H-indol-3-ylmethyl)-, (S)- (9CI) (CA INDEX NAME)

RN 156814-84-5 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(1-methylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-85-6 CAPLUS

CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-2-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-86-7 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1H-indol-3-ylmethyl)-1-methyl-, (S)- (9CI) (CA INDEX NAME)

RN 156814-87-8 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 3-butyl-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-88-9 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-methylpropyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-89-0 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 3-(4-aminobutyl)-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-, (S)- (9CI) (CA INDEX NAME)

$$H_2N$$
  $C1$ 

RN 156814-90-3 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(1-methylpropyl)-, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-91-4 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-dimethyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-92-5 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(phenylmethyl)-, (R)- (9CI) (CA INDEX NAME)

RN 156814-93-6 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1H-indol-3-ylmethyl)-1-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-94-7 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1-methylethyl)-1-(phenylmethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-95-8 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-1-(phenylmethyl)-, (S)- (9CI) (CA INDEX NAME)

RN 156814-96-9 CAPLUS

CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-1-(phenylmethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 156814-97-0 CAPLUS .

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-(1H-indol-3-ylmethyl)-1-(phenylmethyl)-, (S)- (9CI) (CA INDEX NAME)

L10 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

62492-75-5P **145434-35-1P** 181370-78-5P 181370-79-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(solid phase and combinatorial synthesis of benzodiazepines on a solid

support)

ACCESSION NUMBER: 1996:524350 CAPLUS

DOCUMENT NUMBER: 125:221883

TITLE: Solid phase and combinatorial synthesis of

benzodiazepines on a solid support

INVENTOR(S): Ellman, Jonathan A.

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: U.S., 43 pp., Cont.-in-part of U.S. 5,288,514.

CODEN: USXXAM

DOCUMENT TYPE:

ΙT

Patent English

LANGUAGE: Englisi
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5545568	Α	19960813	US 1993-161677	19931202
US 5288514	Α	19940222	US 1992-944469	19920914
PRIORITY APPLN. INFO.:			US 1992-944469	19920914
TEN 148404 OF 15				

IT 145434-35-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(solid phase and combinatorial synthesis of benzodiazepines on a solid support)

RN 145434-35-1 CAPLUS

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-

hydroxyphenyl)-3-methyl-, (S)- (9CI) (CA INDEX NAME)

L10 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2006 ACS on STN

IT 264-64-2D, 1,4-Benzodiazepine, derivs. 184099-26-1

184099-27-2 184099-28-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(non-nucleic acid inhibitors of protein DNA interactions

identified through combinatorial chemical using benzodiazepines that block anti-single stranded DNA monoclonal antibody isolated from lupus-prone

mouse in relation to structure)

ACCESSION NUMBER:

1996:616756 CAPLUS

DOCUMENT NUMBER: TITLE:

Non Nucleic Acid Inhibitors of Protein DNA Interactions Identified through Combinatorial

Chemistry

126:1106

AUTHOR (S):

Stevens, Shawn Y.; Bunin, Barry A.; Plunkett, Matthew J.; Swanson, Patrick C.; Ellman, Jonathan A.; Glick,

Gary D.

CORPORATE SOURCE:

Department of Chemistry, University of Michigan, Ann

Arbor, MI, 48109-1055, USA

SOURCE:

Journal of the American Chemical Society (1996),

118(43), 10650-10651

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

IT 184099-26-1 184099-27-2 184099-28-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(non-nucleic acid inhibitors of protein DNA interactions identified through combinatorial chemical using benzodiazepines that block anti-single stranded DNA monoclonal antibody isolated from lupus-prone mouse in relation to structure)

RN 184099-26-1 CAPLUS

CN 2-Naphthaleneacetic acid, α-[[7-chloro-2,3-dihydro-5-(4hydroxyphenyl)-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]amino]-, [3(S)]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

N 184099-27-2 CAPLUS

CN 1H-1,4-Benzodiazepine-3-propanoic acid, 7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph-CH}_2 \\ \text{O} & \text{N} \\ & \text{HO}_2\text{C-CH}_2\text{-CH}_2 \\ & \text{C1} \\ & \text{OH} \end{array}$$

RN 184099-28-3 CAPLUS CN 1H-1,4-Benzodiazepine-3-propanoi

```
L9
     ANSWER 13 OF 13 USPATFULL on STN
      12794-10-4P, Benzodiazepine
                                    62492-75-5P, (S)-7-Chloro-1,3-dihydro-5-(4-
IT
      hydroxyphenyl)-3-methyl-2H-1,4-benzodiazepin-2-one 145434-34-0P
        (S) -7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-dimethyl-2H-1,4-
      benzodiazepin-2-one 145434-35-1P, (S)-7-Chloro-1,3-dihydro-5-(4-
      hydroxyphenyl) -1-ethyl-3-methyl-(2H) -1,4-benzodiazepin-2-one
      145434-37-3P, (S)-7-Chloro-1,3-dihydro-1-ethyl-5-(4-
      hydroxyphenyl) -3-isopropyl-2H-1, 4-benzodiazepin-2-one
      145434-38-4P, (S)-7-Chloro-1,3-dihydro-1-ethyl-5-(4-
      hydroxyphenyl) -3-(4-aminobutyl) -2H-1,4-benzodiazepin-2-one
      145434-39-5P, (S)-7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-
      ethyl-3-(4-hydroxyphenylmethyl)-(2H)-1,4-benzodiazepin-2-one
      145434-40-8P, (S)-8-Carboxy-7-chloro-1,3-dihydro-3-methyl-5-phenyl-1-
      phenylmethyl-(2H)-1,4-benzodiazepin-2-one 145448-49-3P,
      (S)-7-Chloro-1,3-dihydro-3-carboxymethyl-1-ethyl-5-(4-hydroxyphenyl)-2H-
                               145448-50-6P, (S)-8-Carboxy-7-chloro-1,3-
      1,4-benzodiazepin-2-one
      dihydro-1-methyl-5-phenyl-3-phenylmethyl-(2H)-1,4-benzodiazepin-2-one
      155505-53-6P, (S)-1-Allyl-7-chloro-1,3-dihydro-5-(4-
      hydroxyphenyl) -3-methyl-(2H)-1,4-benzodiazepin-2-one
                                                              155505-54-7P,
      (S)-8-Carboxy-7-chloro-1,3-dihydro-1,3-dimethyl-5-phenyl-(2H)-1,4-
      benzodiazepin-2-one 155505-58-1P 155505-60-5P,
      7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-dimethyl-2H-1,4-
      benzodiazepin-2-one 155505-61-6P, 7-Chloro-1,3-dihydro-5-(4-
      hydroxyphenyl)-1-ethyl-3-methyl-(2H)-1,4-benzodiazepin-2-one
      155505-62-7P, 1-Allyl-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-
      methyl-(2H)-1,4-benzodiazepin-2-one 155505-63-8P,
      7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-ethyl-3-(4-
      hydroxyphenylmethyl) - (2H) -1,4-benzodiazepin-2-one
                                                          155505-64-9P,
      8-Carboxy-7-chloro-1,3-dihydro-1,3-dimethyl-5-phenyl-(2H)-1,4-
      benzodiazepin-2-one 155505-65-0P, 7-Chloro-1,3-dihydro-1-ethyl-
      5-(4-hydroxyphenyl)-3-isopropyl-2H-1,4-benzodiazepin-2-one
      155505-66-1P, 7-Chloro-1,3-dihydro-3-carboxymethyl-1-ethyl-5-(4-
      hydroxyphenyl) -2H-1,4-benzodiazepin-2-one
                                                  155505-67-2P,
      8-Carboxy-7-chloro-1,3-dihydro-1-methyl-5-phenyl-3-phenylmethyl-(2H)-1,4-
      benzodiazepin-2-one
                           155505-68-3P, 8-Carboxy-7-chloro-1,3-dihydro-3-
      methyl-5-phenyl-1-phenylmethyl-(2H)-1,4-benzodiazepin-2-one
      155505-69-4P, 7-Chloro-1,3-dihydro-1-ethyl-5-(4-hydroxyphenyl)-3-
      (4-aminobutyl)-2H-1,4-benzodiazepin-2-one
        (solid-phase and combinatorial preparation of)
ACCESSION NUMBER:
                        94:15540 USPATFULL
TITLE:
                        Solid phase and combinatorial synthesis of
                        benzodiazepine compounds on a solid support
INVENTOR (S):
                        Ellman, Jonathan A., Berkeley, CA, United States
PATENT ASSIGNEE(S):
                        The Regents of the University of California, Oakland,
                        CA, United States (U.S. corporation)
                             NUMBER
                                          KIND
                                                  DATE
                        -----
PATENT INFORMATION:
                        US 5288514
                                                19940222
APPLICATION INFO .:
                        US 1992-944469
                                                19920914
DOCUMENT TYPE:
                        Utility
FILE SEGMENT:
                        Granted
PRIMARY EXAMINER:
                        Pal, Asok
ASSISTANT EXAMINER:
                        Achutamurthy, P.
LEGAL REPRESENTATIVE:
                        Townsend and Townsend Khourie and Crew
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS:
                        4 Drawing Figure(s); 4 Drawing Page(s)
LINE COUNT:
                        1514
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 145434-34-0P, (S)-7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-
      dimethyl-2H-1,4-benzodiazepin-2-one 145434-35-1P,
      (S) -7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-ethyl-3-methyl-(2H)-1,4-
      benzodiazepin-2-one 145434-37-3P, (S)-7-Chloro-1,3-dihydro-1-
```

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ethyl-5-(4-hydroxyphenyl)-3-isopropyl-2H-1,4-benzodiazepin-2-one
      145434-38-4P, (S)-7-Chloro-1,3-dihydro-1-ethyl-5-(4-
     hydroxyphenyl) -3-(4-aminobutyl) -2H-1,4-benzodiazepin-2-one
      145434-39-5P, (S)-7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-
      ethyl-3-(4-hydroxyphenylmethyl)-(2H)-1,4-benzodiazepin-2-one
      145448-49-3P, (S)-7-Chloro-1,3-dihydro-3-carboxymethyl-1-ethyl-5-
      (4-hydroxyphenyl)-2H-1,4-benzodiazepin-2-one 155505-53-6P,
      (S)-1-Allyl-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-(2H)-1,4-
     benzodiazepin-2-one 155505-58-1P 155505-60-5P,
      7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-dimethyl-2H-1,4-
     benzodiazepin-2-one 155505-61-6P, 7-Chloro-1,3-dihydro-5-(4-
      hydroxyphenyl)-1-ethyl-3-methyl-(2H)-1,4-benzodiazepin-2-one
      155505-62-7P, 1-Allyl-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-
      methyl-(2H)-1,4-benzodiazepin-2-one 155505-63-8P,
      7-Chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-ethyl-3-(4-
     hydroxyphenylmethyl) - (2H) -1, 4-benzodiazepin-2-one 155505-65-0P,
      7-Chloro-1,3-dihydro-1-ethyl-5-(4-hydroxyphenyl)-3-isopropyl-2H-1,4-
     benzodiazepin-2-one 155505-66-1P, 7-Chloro-1,3-dihydro-3-
      carboxymethyl-1-ethyl-5-(4-hydroxyphenyl)-2H-1,4-benzodiazepin-2-one
      155505-69-4P, 7-Chloro-1,3-dihydro-1-ethyl-5-(4-hydroxyphenyl)-3-
      (4-aminobutyl) -2H-1, 4-benzodiazepin-2-one
        (solid-phase and combinatorial preparation of)
RN
     145434-34-0 USPATFULL
     2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-
CN
       dimethyl-, (S)- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 145434-35-1 USPATFULL CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 145434-37-3 USPATFULL CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4hydroxyphenyl)-3-(1-methylethyl)-, (S)- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

RN 145434-38-4 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 3-(4-aminobutyl)-7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 145434-39-5 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 145448-49-3 USPATFULL

CN 1H-1,4-Benzodiazepine-3-acetic acid, 7-chloro-1-ethyl-2,3-dihydro-5-(4-

hydroxyphenyl)-2-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 155505-53-6 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-1-(2-propenyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 155505-58-1 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 155505-60-5 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1,3-dimethyl- (9CI) (CA INDEX NAME)

RN 155505-61-6 USPATFULL CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1-ethyl-1,3-dihydro-5-(4-hydroxyphenyl)-3-methyl- (9CI) (CA INDEX NAME)

RN 155505-62-7 USPATFULL CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3methyl-1-(2-propenyl)- (9CI) (CA INDEX NAME)

RN 155505-63-8 USPATFULL CN 2H-1,4-Benzodiazepin-2-one, 7-

ANSWER 11 OF 13 USPATFULL on STN L9

#### IT 223248-08-6P 223248-14-4P 223248-20-2P

223248-25-7P

(preparation of benzodiazepinones as protein tyrosine kinase inhibitors)

ACCESSION NUMBER:

2000:102287 USPATFULL

TITLE:

Inhibitors of protein tyrosine kinases

INVENTOR(S):

Budde, Raymond J. A., Bellaire, TX, United States Ellman, Jonathan A., Oakland, CA, United States Levin, Victor A., Houston, TX, United States Gallick, Gary E., Kingwood, TX, United States Newman, Robert A., Sugar Land, TX, United States

PATENT ASSIGNEE(S):

Board of Regents, The University of Texas System,

Austin, TX, United States (U.S. corporation)

The Regents of the University of California, Oakland,

CA, United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 6100254 20000808 APPLICATION INFO.: US 1997-948839 19971010 (8) DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Raymond, Richard L. Coleman, Brenda ASSISTANT EXAMINER: LEGAL REPRESENTATIVE: Fulbright & Jaworski NUMBER OF CLAIMS: 31

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

7 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT:

3032

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 223248-08-6P 223248-14-4P 223248-20-2P

223248-25-7P

(preparation of benzodiazepinones as protein tyrosine kinase inhibitors)

RN 223248-08-6 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-1,3dihydro-5-(4-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]- (9CI) INDEX NAME)

RN 223248-14-4 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-1,3dihydro-5-(4-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 223248-20-2 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-[(4-hydroxyphenyl)methyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

223248-25-7 USPATFULL

RN

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-[(4-

hydroxyphenyl)methyl]-1-(phenylmethyl)-, (3S)- (9CI) (CA INDEX NAME)
Absolute stereochemistry.

L9 ANSWER 12 OF 13 USPATFULL on STN

=>

Uploading C:\Program Files\Stnexp\Queries\09767283b.str

L12 STRUCTURE UPLOADED

=> d 112

L12 HAS NO ANSWERS

L12

STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 112 sss ful

FULL SEARCH INITIATED 00:39:36

FULL SCREEN SEARCH COMPLETED -

7611 TO ITERATE

100.0% PROCESSED 7611 ITERATIONS

24 ANSWERS

SEARCH TIME: 00.00.01

L13

24 SEA SSS FUL L12

=> d 1-24

L13 ANSWER 1 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 887925-78-2 REGISTRY

ED Entered STN: 15 Jun 2006

CN Butanedioic acid, compd. with 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)-2H-1,4-benzodiazepin-2-one (1:2) (9CI) (CA INDEX NAME)

MF C27 H21 Cl N2 O2 . 1/2 C4 H6 O4

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 216691-95-1

CMF C27 H21 Cl N2 O2

CM 2

CRN 110-15-6 CMF C4 H6 O4

### $HO_2C-CH_2-CH_2-CO_2H$

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 2 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 887925-77-1 REGISTRY

ED Entered STN: 15 Jun 2006

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)-, compd. with 2-propanol (1:1) (9CI) (CA INDEX NAME)

MF C27 H21 Cl N2 O2 . C3 H8 O

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 216691-95-1 CMF C27 H21 Cl N2 O2

CM · 2

CRN 67-63-0 CMF C3 H8 O

OH | H<sub>3</sub>C- CH- CH<sub>3</sub>

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 3 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 887925-76-0 REGISTRY

ED Entered STN: 15 Jun 2006

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)-, (2E)-2-butenedioate (2:1) (salt) (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C27 H21 Cl N2 O2 . 1/2 C4 H4 O4

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 216691-95-1 CMF C27 H21 Cl N2 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 4 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 887925-75-9 REGISTRY

ED Entered STN: 15 Jun 2006

CN Acetic acid ethyl ester, compd. with 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)-2H-1,4-benzodiazepin-2-one (1:2) (9CI) (CA INDEX NAME)

MF C27 H21 C1 N2 O2 . 1/2 C4 H8 O2

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 216691-95-1 CMF C27 H21 Cl N2 O2

CM 2

CRN 141-78-6 CMF C4 H8 O2

Et-O-Ac

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 5 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 887925-74-8 REGISTRY

ED Entered STN: 15 Jun 2006

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)-, compd. with ethanol (1:1) (9CI) (CA INDEX NAME)

MF C27 H21 Cl N2 O2 . C2 H6 O

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 216691-95-1 CMF C27 H21 Cl N2 O2

CM 2

CRN 64-17-5 CMF C2 H6 O

H<sub>3</sub>C-- СН<sub>2</sub>-- ОН

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 6 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 887925-73-7 REGISTRY

ED Entered STN: 15 Jun 2006

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)-, compd. with acetonitrile (1:1) (9CI) (CA INDEX NAME)

MF C27 H21 Cl N2 O2 . C2 H3 N

SR CA

LC STN Files: CA, CAPLUS

CM . 1

CRN 216691-95-1

CMF C27 H21 Cl N2 O2

CM 2

CRN 75-05-8 CMF C2 H3 N

 $H_3C-C=N$ 

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 7 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 887925-72-6 REGISTRY

ED Entered STN: 15 Jun 2006

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)-, monoacetate (salt) (9CI) (CA INDEX NAME)

MF C27 H21 Cl N2 O2 . C2 H4 O2

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 216691-95-1

CMF C27 H21 Cl N2 O2

CM 2

CRN 64-19-7 CMF C2 H4 O2

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 8 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 869718-62-7 REGISTRY

ED Entered STN: 12 Dec 2005

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[5-[7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-3-(2-naphthalenylmethyl)-2-oxo-1H-1,4-benzodiazepin-1-yl]pentyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C41 H44 Cl N5 O4 S

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

# Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 9 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 869718-61-6 REGISTRY

Entered STN: 12 Dec 2005 ED

2H-1,4-Benzodiazepin-2-one, 1-(5-aminopentyl)-7-chloro-1,3-dihydro-5-(4-CN hydroxyphenyl) -3-(2-naphthalenylmethyl) - (9CI) (CA INDEX NAME)

C31 H30 Cl N3 O2 MF

SR CA

CA, CAPLUS, TOXCENTER, USPATFULL LC STN Files:

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 10 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN L13

RN

852240-60-9 REGISTRY Entered STN: 14 Jun 2005 ED

2H-1,4-Benzodiazepin-2-one, 3-amino-1-[1,1'-biphenyl]-4-yl-7-chloro-1,3-CN dihydro-5-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

C27 H20 C1 N3 O2 MF

SR CA

CA, CAPLUS, TOXCENTER, USPATFULL LC STN Files:

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 11 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 610310-74-2 REGISTRY

ED Entered STN: 29 Oct 2003

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(3-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

MF C27 H21 Cl N2 O2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 12 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 610310-73-1 REGISTRY

ED Entered STN: 29 Oct 2003

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxy-3-methylphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

MF C28 H23 Cl N2 O2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT7ULL

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3 REFERENCES IN FILE CA (1907 TO DATE)

#### 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 13 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 498557-86-1 REGISTRY

ED Entered STN: 13 Mar 2003

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[5-[(3S)-7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-3-(2-naphthalenylmethyl)-2-oxo-1H-1,4-benzodiazepin-1-yl]pentyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C41 H44 Cl N5 O4 S

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

### Absolute stereochemistry.

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 14 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 498557-85-0 REGISTRY

ED Entered STN: 13 Mar 2003

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[5-[(3R)-7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-3-(2-naphthalenylmethyl)-2-oxo-1H-1,4-benzodiazepin-1-yl]pentyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C41 H44 Cl N5 O4 S

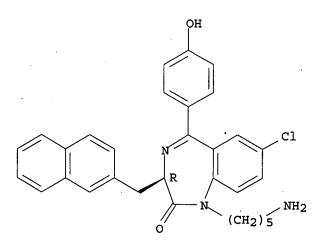
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L13 ANSWER 15 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 498557-84-9 REGISTRY
- ED Entered STN: 13 Mar 2003
- CN 2H-1,4-Benzodiazepin-2-one, 1-(5-aminopentyl)-7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-3-(2-naphthalenylmethyl)-, (3R)- (9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C31 H30 Cl N3 O2
- SR CA
- LC STN Files: CA, CAPLUS, TOXCENTER

### Absolute stereochemistry.



# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L13 ANSWER 16 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 498557-83-8 REGISTRY
- ED Entered STN: 13 Mar 2003

2H-1,4-Benzodiazepin-2-one, 1-(5-aminopentyl)-7-chloro-1,3-dihydro-5-(4-CNhydroxyphenyl) -3-(2-naphthalenylmethyl) -, (3S)- (9CI) (CA INDEX NAME)

STEREOSEARCH FS

MF C31 H30 Cl N3 O2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- ANSWER 17 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN L13
- RN
- 304681-27-4 REGISTRY Entered STN: 28 Nov 2000 ED
- CN2H-1,4-Benzodiazepin-2-one, 3-amino-1-([1,1'-biphenyl]-4-ylmethyl)-7chloro-1,3-dihydro-5-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)
- C28 H22 Cl N3 O2 MF
- SR CA-
- LC STN Files: CA, CAPLUS, TOXCENTER

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 18 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 304681-26-3 REGISTRY

ED Entered STN: 28 Nov 2000

CN 3-Pyridinecarboxamide, N-[1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-1H-1,4-benzodiazepin-3-yl]- (9CI) (CA INDEX NAME)

MF C34 H25 C1 N4 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 19 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 304681-25-2 REGISTRY

ED Entered STN: 28 Nov 2000

CN Benzamide, N-[2-[[1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-1H-1,4-benzodiazepin-3-yl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

MF C37 H29 Cl N4 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 20 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 304681-24-1 REGISTRY

ED Entered STN: 28 Nov 2000

CN Pentanediamide, N-[1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-1H-1,4-benzodiazepin-3-yl]-N'-phenyl- (9CI) (CA INDEX NAME)

MF C39 H33 Cl N4 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 21 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 304681-23-0 REGISTRY

ED Entered STN: 28 Nov 2000

CN 4-Piperidinecarboxamide, 1-acetyl-N-[1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-1H-1,4-benzodiazepin-3-yl]-(9CI) (CA INDEX NAME)

MF C36 H33 Cl N4 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L13 ANSWER 22 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 304681-22-9 REGISTRY
- ED Entered STN: 28 Nov 2000
- CN 4-Isoxazolecarboxamide, N-[7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-2-oxo-1H-1,4-benzodiazepin-3-yl]-5-methyl-3-phenyl- (9CI) (CA INDEX NAME)
- MF C27 H21 Cl N4 O4
- SR CA
- LC STN Files: CA, CAPLUS, TOXCENTER

#### \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L13 ANSWER 23 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN
- RN 304681-21-8 REGISTRY
- ED Entered STN: 28 Nov 2000
- CN 1H-Pyrazole-3-carboxamide, N-[1-([1,1'-biphenyl]-4-ylmethyl)-7-chloro-2,3-dihydro-5-(4-hydroxyphenyl)-2-oxo-1H-1,4-benzodiazepin-3-yl]-4-nitro-(9CI) (CA INDEX NAME)
- MF C32 H23 Cl N6 O5
- SR CA
- LC STN Files: CA, CAPLUS, TOXCENTER

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 24 OF 24 REGISTRY COPYRIGHT 2006 ACS on STN

RN 216691-95-1 REGISTRY

ED Entered STN: 07 Jan 1999

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Bz 423

CN BZ 48

DR 498576-83-3

MF C27 H21 Cl N2 O2

CI COM

SR CA

LC STN Files:

CA, CAPLUS, PROUSDDR,

R, SYNTHLINE, TOXCENTER, USPATFULL

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

19 REFERENCES IN FILE CA (1907 TO DATE)

19 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> fil caplus, uspatful, toxcenter COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION ·

FULL ESTIMATED COST

213.42

681.72

FILE 'CAPLUS' ENTERED AT 00:40:40 ON 16 DEC 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 00:40:40 ON 16 DEC 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'TOXCENTER' ENTERED AT 00:40:40 ON 16 DEC 2006 COPYRIGHT (C) 2006 ACS

=> s 113

L14 23 FILE CAPLUS L15 10 FILE USPATFULL L16 18 FILE TOXCENTER

TOTAL FOR ALL FILES L17 51 L13

L17 ANSWER 23 OF 51 CAPLUS COPYRIGHT 2006 ACS on STN

216691-89-3P 216691-90-6P 216691-91-7P 216691-92-8P 216691-93-9P IT

216691-94-0P 216691-95-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of 3-substituted 1,4-benzodiazepin-2-ones)

ACCESSION NUMBER:

1998:700185 CAPLUS

DOCUMENT NUMBER:

130:38362

TITLE: AUTHOR (S): Synthesis of 3-substituted 1,4-benzodiazepin-2-ones Kim, Kyungjin; Volkman, Steven K.; Ellman, Jonathan A.

CORPORATE SOURCE:

Department of Chemistry, University of California,

Berkeley, CA, 94720, USA

SOURCE:

Journal of the Brazilian Chemical Society (1998),

9(4), 375-379

CODEN: JOCSET; ISSN: 0103-5053 Sociedade Brasileira de Quimica

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

OTHER SOURCE(S):

CASREACT 130:38362

IT 216691-95-1P

> RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of 3-substituted 1,4-benzodiazepin-2-ones)

216691-95-1 CAPLUS RN

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-CNmethyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT FILE 'CAPLUS, USPATFULL, TOXCENTER' ENTERED AT 00:40:40 ON 16 DEC 2006

L14 23 FILE CAPLUS L15 10 FILE USPATFULL L16 18 FILE TOXCENTER

TOTAL FOR ALL FILES

L17 51 S L13

=> s l15 7-10 kwic, hitstr, ibib

MISSING OPERATOR L15 7-10

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> d l15 7-10 hitstr, ibib

ANSWER 7 OF 10 USPATFULL on STN

216691-95-1, Bz-423

(benzodiazepine-related inhibitors of mitochondrial F0F1-ATPase and their therapeutic applications and targets)

RN 216691-95-1 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

ACCESSION NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

2004:307110 USPATFULL

Compositions and methods relating to novel compounds and targets thereof

Glick, Gary D., Ann Arbor, MI, UNITED STATES

The Regents of the University of Michigan, Ann Arbor, MI, UNITED STATES (U.S. corporation)

NUMBER KIND DATE -----------

PATENT INFORMATION: APPLICATION INFO .:

RELATED APPLN. INFO.:

US 2004241781 A1 20041202 US 2004-795535 A1 20040308 (10)

Continuation-in-part of Ser. No. US 2003-634114, filed on 4 Aug 2003, PENDING Continuation-in-part of Ser. No.

US 2003-427211, filed on 1 May 2003, PENDING

Continuation-in-part of Ser. No. US 2002-217878, filed on 13 Aug 2002, PENDING Continuation of Ser. No. US 2001-767283, filed on 22 Jan 2001, PENDING Continuation

of Ser. No. US 2000-700101, filed on 8 Nov 2000,

PENDING A 371 of International Ser. No. WO 2000-US11599, filed on 27 Apr 2000, PENDING

•			NUMBER	DATE	
•					
PRIORITY	INFORMATION:	US	1999-131761P	19990430	(60)
		US	1999-165511P	19991115	(60)
		IIS	2000-191855D	20000324	(60)

US 2001-312560P 20010815 (60) US 2001-313689P 20010820 (60) US 2002-396670P 20020718 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: David A. Casimir, MEDLEN & CARROLL, LLP, Suite 350, 101

Howard Street, San Francisco, CA, 94105

NUMBER OF CLAIMS: 9 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 596 Drawing Page(s)

LINE COUNT: 3543

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 8 OF 10 USPATFULL on STN

IT 610310-73-1 610310-74-2

(1,4-Benzodiazepine-2-one derivs. and method for regulating apoptosis and cellular proliferation)

RN 610310-73-1 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxy-3-methylphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

RN 610310-74-2 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(3-hydroxyphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

ACCESSION NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

2004:280879 USPATFULL

Compositions relating to novel compounds and targets

thereof

Glick, Gary D., Ann Arbor, MI, UNITED STATES

The Regents of the University of Michigan, Ann Arbor, MI\_{U,S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2004220180 A1 20041104

US 7144880 B2 20061205

APPLICATION INFO.: US 2003-427212 A1 20030501 (10)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street,

San Francisco, CA, 94105

NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 596 Drawing Page(s)

LINE COUNT: 2960

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 9 OF 10 USPATFULL on STN

IT 610310-73-1

(benzodiazepine compds. and therapeutic use)

RN 610310-73-1 USPATFULL

CN 2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxy-3-methylphenyl)-1-methyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

ACCESSION NUMBER: 2004:227972 USPATFULL

TITLE:

Compositions and methods relating to novel compounds

and targets thereof

INVENTOR(S): | Glick, Fary D., Ann Arbor, MI, UNITED STATES

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor,

MI (U.S. corporation)

NUMBER KIND ----PATENT INFORMATION: US 2004176358 **A1** 20040909 APPLICATION INFO.: US 2003-634114 A1 20030804 (10) RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-427211, filed on 1 May 2003, PENDING Continuation-in-part of Ser. No. US 2002-217878, filed on 13 Aug 2002, PENDING Continuation of Ser. No. US 2001-767283, filed on 22 Jan 2001, PENDING Continuation of Ser. No. US 2000-700101, filed on 8 Nov 2000, PENDING A 371 of International Ser. No. WO 2000-US11599, filed on 27 Apr 2000, PENDING

			NUMBER	DATE	
PRIORITY	INFORMATION:	US	1999-131761P	19990430	(60)
		US	1999-165511P	19991115	(60)
		US.	2000-191855P	20000324	(60)
		US	2001-312560P	20010815	(60)
		US	2001-313689P	20010820	(60)
		US	2002-396670P	20020718	(60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

David A. Casimir, MEDLEN & CARROLL, LLP, Suite 350, 101

Howard Street, San Francisco, CA, 94105

NUMBER OF CLAIMS:

1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

596 Drawing Page(s)

3404

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 10 OF 10 USPATFULL on STN

IT 216691-95-1

(novel benzodiazepine compds. to regulate programmed cell death and target cells to treat diseases in relation to drug screening)

216691-95-1 USPATFULL RN

2H-1,4-Benzodiazepin-2-one, 7-chloro-1,3-dihydro-5-(4-hydroxyphenyl)-1-CNmethyl-3-(2-naphthalenylmethyl)- (9CI) (CA INDEX NAME)

ACCESSION NUMBER:

TITLE:

2003:173185 USPATFULL

Compositions and methods relating to novel benzodiazepine compounds and targets thereof

INVENTOR(S):

Glick, Gary D., Ann Arbor, MI, UNITED STATES

Opipari, Anthony W., Ann Arbor, MI, UNITED STATES Regents of the University of Michigan, Ann Arbor, MI PATENT ASSIGNEE(S):

(U.S. ¢orporation)

NUMBER	KIND	DATE	
US 2003119029	A1	20030626	
US 2002-217878	A1	20020813	(10)

PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2001-767283, filed on 22 Jan 2001, PENDING Continuation of Ser. No. US

2000-700101, filed on 8 Nov 2000, PENDING A 371 of International Ser. No. WO 2000-US11599, filed on 27 Apr

2000, PENDING

		NUMBER DAT	E `
PRIORITY	INFORMATION:	US 1999-131761P 19990	 430 (60)
			115 (60)
		US 2000-191855P 20000	324 (60)
	•	US 2001-312560P 20010	815 (60)
		US 2001-313689P 20010	820 (60)
DOCUMENT	TYPE:	Utility	

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

MEDLEN & CARROLL, LLP, 101 Howard Street, Suite 350,

San Francisco, CA, 94105

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

14 Drawing Page(s) 3901

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L16 ANSWER 15 OF 18 TOXCENTER COPYRIGHT 2006 ACS on STN
     17311-35-2; 216691-88-2; 216691-95-1; 610310-60-6; 610310-61-7;
     610310-62-8; 610310-63-9; 610310-64-0; 610310-65-1; 610310-66-2;
     610310-67-3; 610310-68-4; 610310-69-5; 610310-70-8; 610310-71-9;
     610310-72-0; 610310-73-1; 610310-74-2; 610310-75-3;
     610310-76-4
ACCESSION NUMBER:
                     2003:222109 TOXCENTER
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DOCUMENT NUMBER:
                     CA13920307742W
TITLE:
                     Structure activity studies of a novel cytotoxic
                     benzodiazepine
                     Boitano, Anthony; Emal, Cory D.; Leonetti, Francesco;
AUTHOR (S):
                     Blatt, Neal B.; Dineen, Thomas A.; Ellman, Jonathan A.;
                     Roush, William R.; Opipari, Anthony W.; Glick, Gary D.
                     Department of Chemistry, University of Michigan, Ann
CORPORATE SOURCE:
                     Arbor, MI, 48109-1055, USA.
                     Bioorganic & Medicinal Chemistry Letters, (2003) Vol. 13,
SOURCE:
                     No. 19, pp. 3327-3330.
                     CODEN: BMCLE8. ISSN: 0960-894X.
                     UNITED STATES
COUNTRY:
DOCUMENT TYPE:
                     Journal
                     CAPLUS
FILE SEGMENT:
                     CAPLUS 2003:689667
OTHER SOURCE:
LANGUAGE:
                     English
ENTRY DATE:
                     Entered STN: 9 Sep 2003
                     Last Updated on STN: 11 Nov 2003
L16 ANSWER 16 OF 18 TOXCENTER COPYRIGHT 2006 ACS on STN
     37205-63-3 (ATP synthase)
RN
     56-65-5 (5'-ATP)
     7782-44-7Q (Oxygen, reactive species)
     11062-77-4 (Superoxide)
     12794-10-4Q (Benzodiazepine, derivs.)
     216691-95-1
RN
ACCESSION NUMBER:
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COPYRIGHT:
DOCUMENT NUMBER:
                     CA13904047211Y
TITLE:
                     Compositions and methods relating to novel benzodiazepine
                     compounds and targets thereof
AUTHOR(S):
                     Glick, Gary D.; Opipari, Anthony W.
CORPORATE SOURCE:
                     ASSIGNEE: Regents of the University of Michigan
PATENT INFORMATION:
                     US 2003119029 A1 26 Jun 2003
                     (2003) U.S. Pat. Appl. Publ., 54 pp., Cont.-in-part of
SOURCE:
                     U.S. Ser. No. 767,283.
                     CODEN: USXXCO.
                     UNITED STATES
COUNTRY:
DOCUMENT TYPE:
                     Patent
FILE SEGMENT:
                     CAPLUS
OTHER SOURCE:
                     CAPLUS 2003:492543
LANGUAGE:
                     English
ENTRY DATE:
                     Entered STN: 15 Jul 2003
                     Last Updated on STN: 31 Oct 2006
L16
    ANSWER 17 OF 18 TOXCENTER COPYRIGHT 2006 ACS on STN
RN
        . . (Allopurinol)
     1397-94-0 (Antimycin A)
     12794-10-4Q (Benzodiazepine, derivs.)
     26628-22-8 (Sodium azide (Na(N3)))
     51481-61-9 (Cimetidine)
     53123-88-9 (Rapamycin)
     59865-13-3 (Cyclosporin A)
     104987-11-3 (FK506)
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216691-95-1 (BZ 48)
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     187459-22-9; 216691-95-1; 304681-21-8;
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     498557-87-2
ACCESSION NUMBER:
                     2003:62947 TOXCENTER
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COPYRIGHT:
DOCUMENT NUMBER:
                     CA13813180767E
TITLE:
                     Compositions and methods relating to novel benzodiazepine
                     compounds and targets thereof
                     Glick, Gazy D.; Opipari, Anthony W.
AUTHOR(S):
                     ASSIGNEE: The Regents of the University of Michigan
CORPORATE SOURCE:
PATENT INFORMATION:
                     WO 2003015703 A2 27 Feb 2003
SOURCE:
                     (2003) PCT Int. Appl., 123 pp.
                     COMEN: PIXXD2.
                     UNITED STATES
COUNTRY:
                     (Patent
DOCUMENT TYPE:
FILE SEGMENT:
                     CAPLUS
                     CAPLUS 2003:154190
OTHER SOURCE:
LANGUAGE:
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ENTRY DATE:
                     Entered STN: 18 Mar 2003.
                     Last Updated on STN: 22 Aug 2006
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     12794-10-4Q (Benzodiazepine, derivs.)
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     304681-22-9; 304681-23-0; 304681-24-1;
     304681-25-2; 304681-26-3; 304681-27-4
ACCESSION NUMBER:
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                     Copyright 2006 ACS
COPYRIGHT:
DOCUMENT NUMBER:
                     CA13324329629T
TITLE:
                     Therapeutic applications of pro-apoptotic benzodiazepines
                     Glick, Gary D.; Opipari, Anthony W., Jr.
AUTHOR (S):
                     ASSIGNÉE: Opipari, Anthony W., Jr.
CORPORATE SOURCE:
                     WO 200066106 A2 9 Nov 2000
PATENT INFORMATION:
                     (20,00) PCT Int. Appl., 112 pp.
SOURCE:
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COUNTRY:
                     UNITED STATES
DOCUMENT TYPE:
                     /Patent
                     CAPLUS
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OTHER SOURCE:
                     CAPLUS 2000:790295
LANGUAGE:
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ENTRY DATE:
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L18
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CN
     Bz-423
     7-Chloro-5-(4-hydroxyphenyl)-1-methyl-3-(2-naphthylmethyl)-2,3-dihydro-1H-
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     C27 H21 Cl N2 O2
MF
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CC
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     Tissue Diseases; Treatment of Other Autoimmune Disorders; Apoptosis
     Inducers; Mitochondrial F1F0 ATPase Hydrolase Inhibitors
     Preclinical
HDP
STA Actively Investigated
     University of California, Berkeley; University of Michigan
CO
ED
     Entered STN: 15 Jan 2004
     Last Updated on STN: 15 Nov 2006
STRUCTURE:
/ BINARY DATA / IMAGE001.TIF
RX
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     Acylation of the 2-aminobenzophenone (I) with bromoacetyl bromide (II)
ΤX
     provides the bromoacetamide (III). Subsequent treatment of (III) with
     ammonia leads to the benzodiazepinone (\cancel{1} V). Methylation of the lactam N
     with iodomethane in the presence of K2CO3 gives rise to (V). The potassium
     enolate of benzodiazepinone (V) is then alkylated by 2-
     (bromomethyl) naphthalene (VI) to furnish the naphthylmethyl derivative (VII). Finally, methyl ether cleavage using AlBr3 in ethanethiol provides
     the target phenolic compound'
/ BINARY DATA / IMAGE002.TIF
     Synthesis of 3-substituted 1,4-benzodiazepin-2-ones
ΤI
ΑU
     Kim, K.; Volkman, S.K.; Ellman, J.A.
so
     J Braz Chem Soc (1998), 9(4), 375
RCT
     (II) 14005
     Bromoacetyl bromide; 2-Bromoacetyl bromide
CN
RN
     598-21-0
     C2 H2 Br2 O
MF
     201.85
MW
CO
     ABCR GmbH & Co.; Acros Organics; Aldrich; Alfa Aesar; American
     Radiolabeled Chemicals / Inc.; Chemada Fine Chemicals; ChemService, Inc.;
     Contract Chemicals Ltd.; Dottikon Exclusive Synthesis AG; Fangqiao East
     Chemical Plant; Fluka; Lancaster Synthesis Inc.; Narchem Corporation;
     Oakwood Products, Inc.; Ocean Chemicals Group; Pfaltz & Bauer, Inc.;
     Sinobrom Limited; Spectrum Quality Products, Inc.; TCI; Wilshire Chemical
     Co., Inc.; Xinchem Company; Yancheng Longsheng Solvent Plant
RCT
     (VI) 35612
CN
     2-(bromomethyl) naphthalene
RN
     939-26-4
     C11 H9 Br
MF
MW
     221.1
CO
     Acros Organics; Aldrich; Fluka; Goldlink Industries Co., LTD; Lancaster
     Synthesis Inc.; Narchem Corporation; Richman Chemical Inc.; Wujin Linchuan
     Chemical Factory
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=> d all,

RCT

(VII) 63042

MF C28 H23 C1 N2 O2

MW 454.96

RCT (V) 63043

MF C17 H15 Cl N2 O2

MW 314.77

RCT (I) 63044

MF C14 H12 Cl N O2

MW 261.71

RCT (III) 63045

MF C16 H13 Br Cl N O3

MW 382.64

RCT (IV) 63046

MF C16 H13 Cl N2 O2

MW 300.75 .

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